

Work Order ID 78043

78043

Page 1

December-28-11 8:12:17 AM

Item ID: D4149-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Crosstube Lug Assembly, Aft
 Start Date: 28/12/2011 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 12/01/2012 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: M.C.J Date: 11/12/28 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4149	C								
100		0.00							
100									
Small Fab	Memo	0.00							
Small Fab	1- Assemble as per dwg <i>prch hit</i>								
110	QC5- Inspect part completeness to step on W/O	0.00							
110									
QC	Memo	0.00							
Quality Control									
120	Identify as per dwg & Stock Location: <u>468</u>	0.00							
120									
Packaging	Memo	0.00							
Packaging									

12/01/12 (6)
12/01/9 (6)

8/12/01/12

(6)

(6x)

SP 12-01-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

78043

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 28/12/2011 **Start Qty:** 8.00 ***8***

Cust Item ID:

Required Date: 12/01/2012 **Req'd Qty:** 8.00 ***Q***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Operation Description

Set Up/ Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject Number

**Insp.
Stamp**

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

OK 12/01/13

MF
12-01-12

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NOTE: Date & initial all entries

Picklist Print

December-28-11 8:12:21 AM

Page 1

Work Order ID: 78043

78043

Parent Item: D4149-041

D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 28/12/2011

Required Date: 12/01/2012

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP Rev:A 10.06.24 new issue DD verf:EC

IPP Rev:B 10.07.22 as per revB DD verf:JLM

11.03.03 as per revC DD verf:JLM

IPP Rev:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MS21043-3

Purchased

No

100

Each

1,469.000

2

16 1/2

MS21043-3

**

Nut

Location

Loc Qty

Loc Code

FG

72

103691

72

ST300

750

119901

750

ST301

647

118077

2

118614

441

118686

30

119758

174

MS21043-4

Purchased

No

100

Each

1,275.000

3

18

MS21043-4

**

Nut

Location

Loc Qty

Loc Code

FG

40

104603

40

ST300

470

118686

470

ST301

765

119309

269

119546

496

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 2

Work Order ID: 78043

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Parent Item: D4149-041

D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 28/12/2011

Required Date: 12/01/2012

Start Qty: 8.00

Required Qty: 8.00

D3910-1 Manufactured No

100

Each

8.0000

1

D3910-1

Crosstube Lug

**

Location

Loc Qty

Loc Code

st507

8

73527

8

D4091-1 Manufactured No

100

Each

23.0000

1

D4091-1

Mounting Lug

**

Location

Loc Qty

Loc Code

ST458

20

77320

20

ST460

3

69605

3

D4149-1 Manufactured No

100

Each

1.0000

2

D4149-1

Crosstube Lug Plate, Aft

**

Location

Loc Qty

Loc Code

ST133

1

69604

1

D4149-3 Manufactured No

100

Each

2.0000

1

D4149-3

Spacer

**

Location

Loc Qty

Loc Code

ST133

2

68870

2

73527

77320 3x

69605 3x

69604 1x

78046 4x / 12/01/11

68870 2x

W/O:		WORK ORDER CHANGES					
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D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 28/12/2011

Required Date: 12/01/2012

Start Qty: 8.00

Required Qty: 8.00

D4149-5 Manufactured No

100 Each 10.0000 1

D4149-5

Eyebolt Stud

**

Location

Loc Qty

Loc Code

ST133

10

73548

10

AN3C12A

Purchased No

100 Each 64.0000 2

AN3C12A

Bolts

**

Location

Loc Qty

Loc Code

ST351

64

117514

4

118112

5

118422

17

118451

22

119510

16

AN4C13A

Purchased No

100 Each 15.0000 3

AN4C13A

BOLT

**

Location

Loc Qty

Loc Code

ST357

15

118838

15

MS20615-4M18

Purchased No

100 Each 428.0000 3

MS20615-4M18

Rivet

**

Location

Loc Qty

Loc Code

ST323

428

118077

243

118543

185

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item: D4149-041

D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 28/12/2011

Required Date: 12/01/2012

Start Qty: 8.00

Required Qty: 8.00

NAS1149C0332R

Purchased

No

100

Each

4,283.000

4

3224

NAS1149C0332R

**

Washer

Location

Loc Qty

Loc Code

ST297

4283

118354

705

119124

12

119736

3566

119736

NAS1149C0432R

Purchased

No

100

Each

3,780.000

6

4836

NAS1149C0432R

**

Washer

Location

Loc Qty

Loc Code

ST297

3780

117291

2780

119124

1000

117291

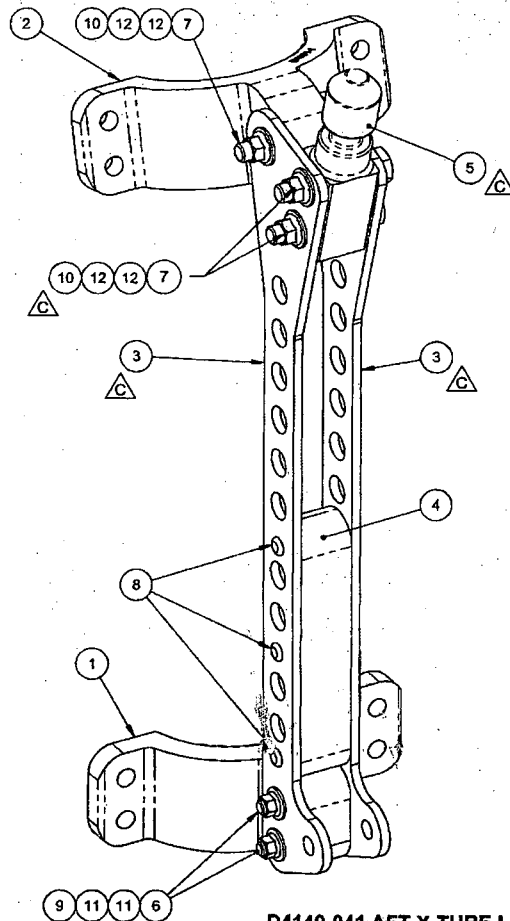
Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D4149-041 AFT X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.21 lbs

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4149-041	AFT X-TUBE LUG ASSY
1	1	D3910-1	X-TUBE LUG
2	1	D4091-1	MOUNTING LUG
3	2	D4149-1	AFT X-TUBE LUG PLATE
4	1	D4149-3	SPACER
5	1	D4149-5	EYEBOLT STUD
6	2	AN3C12A	BOLT
7	3	AN4C13A	BOLT
8	2	MS20615-4M18	RIVET
9	2	MS21043C3	NUT
10	3	MS21043C4	NUT
11	4	NAS1149C0332R	WASHER
12	6	NAS1149C0432R	WASHER

STN
K114
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO
WITHIN
WORK
NO. 78043 M.L.S
11/12/20

RELEASED
2011-02-24

C	HOLE DIA CHANGED TO 0.252" (D8-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1, D7-2)	SC	11.02.22
B	MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); ADDED D4149-5 (SHT 5); D4149-5 WAS D3909-5 (ZN D3-1 & D7-2); REPLACED QTY(5) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, C7-1, B7-2 & B3-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D8-3); REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

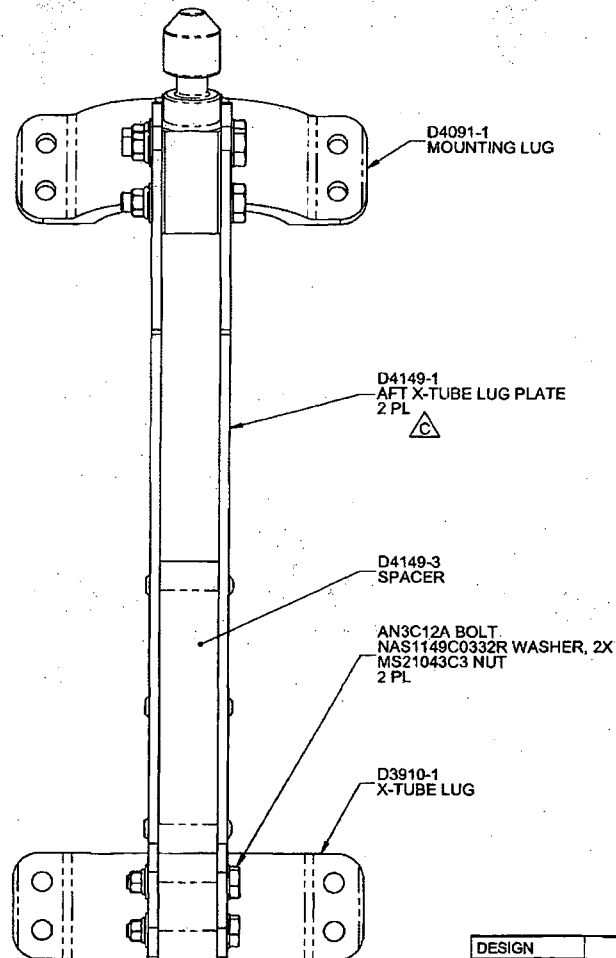
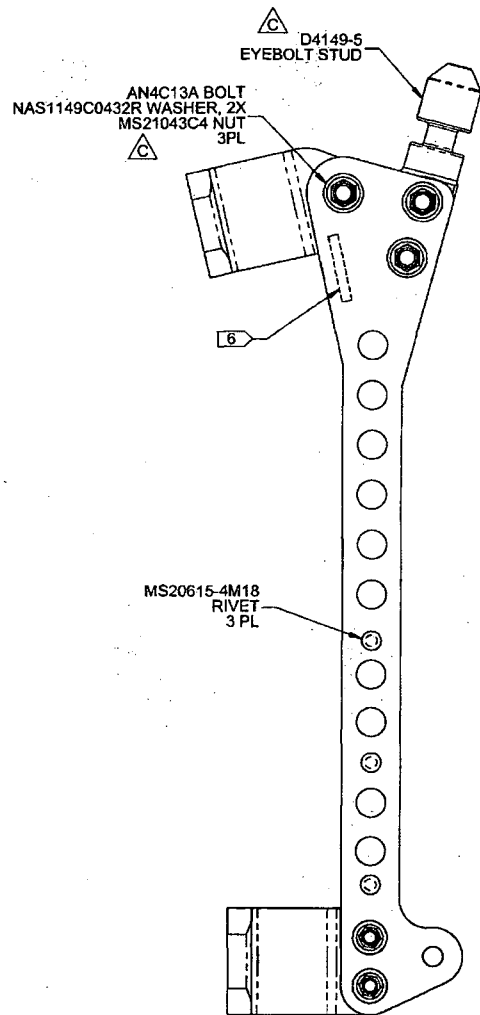
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

78013



D4149-041 AFT X-TUBE LUG ASSY

RELEASED
2011-02-24
MP

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	h	DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

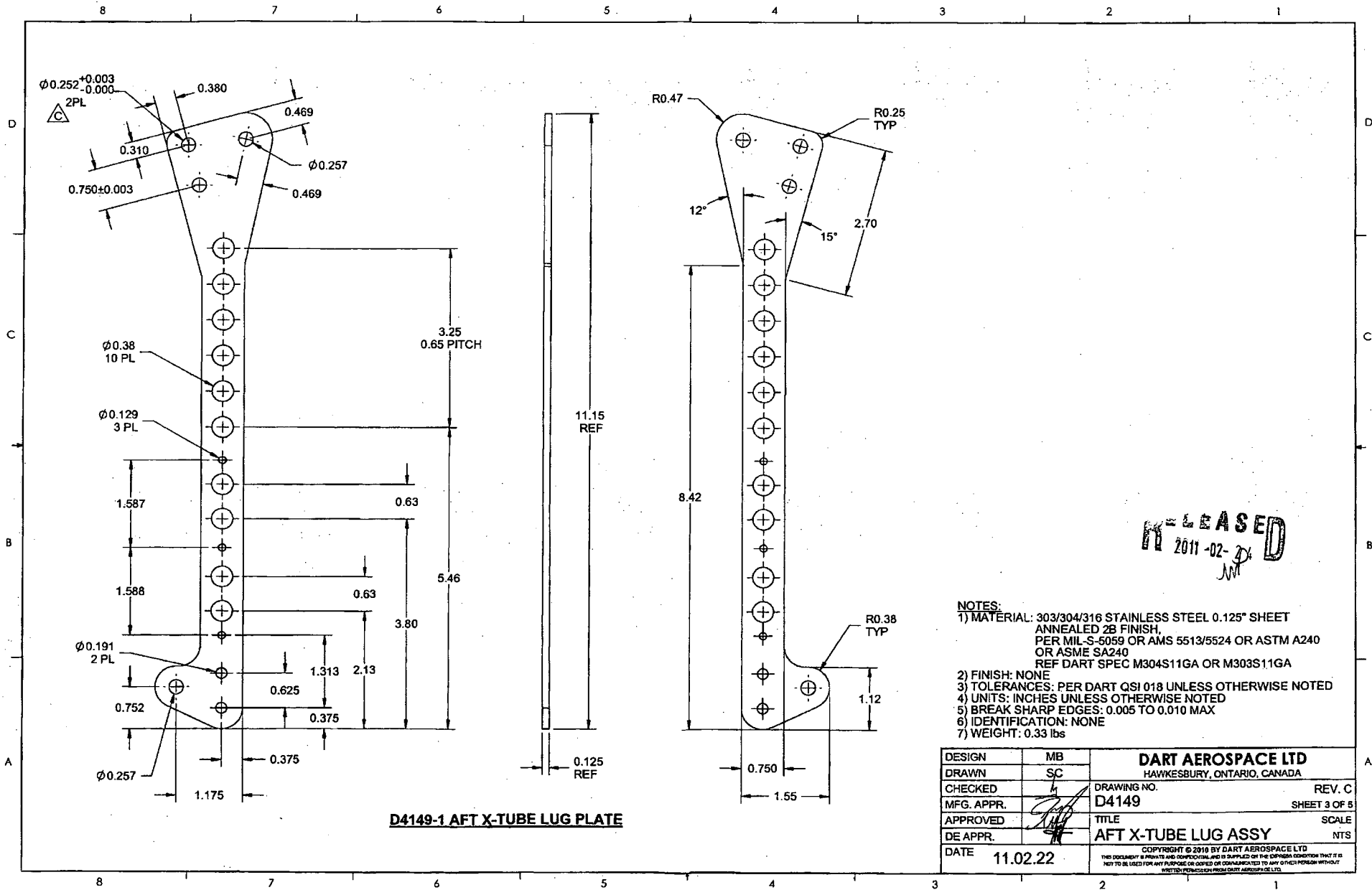
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

78043



- NOTES:**
- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET
ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240
OR ASME SA240
REF DART SPEC M304S11GA OR M303S11GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.33 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

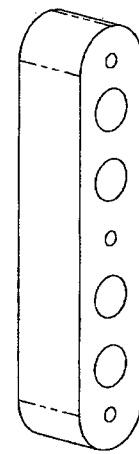
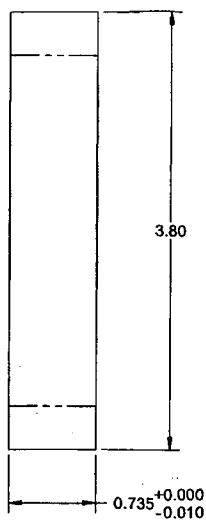
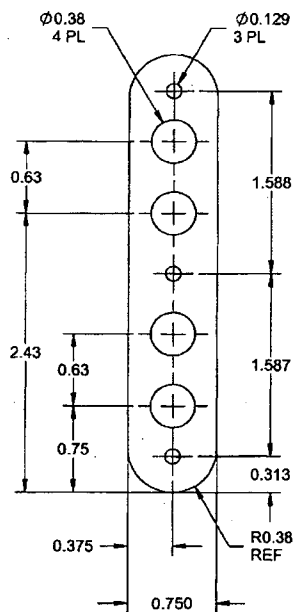
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

78043






D4149-3 SPACER

RELEASED
2011-02-22

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A276 OR A582
REF DART SPEC MS304B OR MS303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.47 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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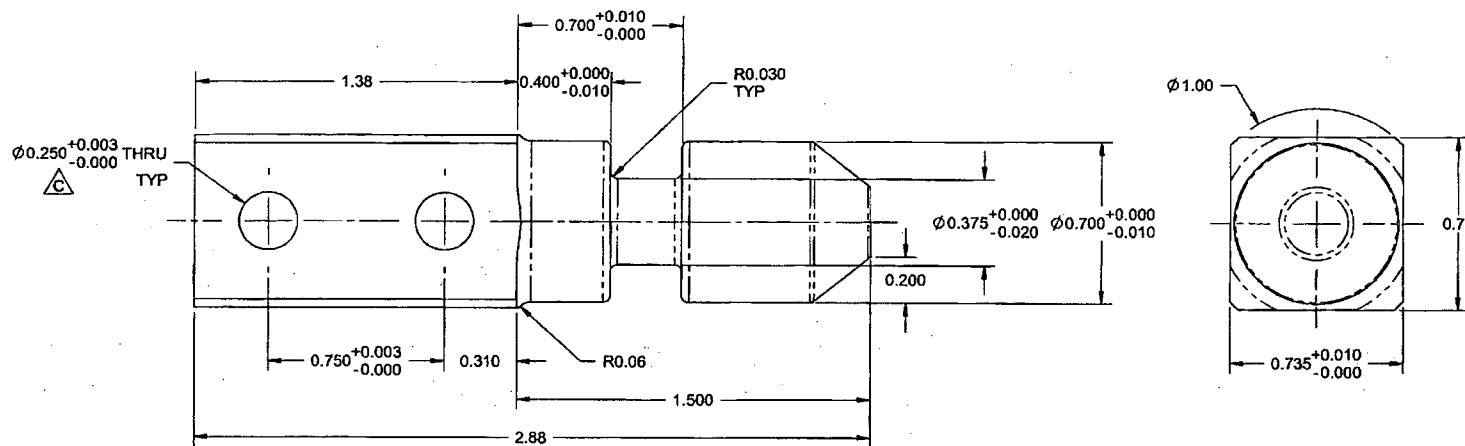
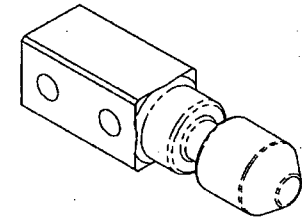
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D4149-5 EYEBOLT STUD

RELEASED
2011-02-24

- NOTES:
- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A276 OR A582
REF DART SPEC MS304B OR MS303B
 - 2) FINISH: NONE
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-5" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.32 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D4149	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		AFT X-TUBE LUG ASSY	NTS
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